

30.1 cu.ft. | 851 L



MCO-80ICL-PA | CO2INC30-G

# PRESIDENT PROCESS

MCO-80ICL-PA | CO2INC30-G

# CytoGrow ReachIn

CO<sub>2</sub> Incubator





The ReachIn CO<sub>2</sub> incubator is designed to save lab space while offering the flexibility to grow your culturing needs. The control system provides a precise and repeatable chamber environment.

# Horizontal Laminar Airflow

The cross shelf, horizontal laminar airflow system promotes optimum temperature uniformity throughout the chamber which contributes to quick temperature recovery after door openings. Side plenum walls are perforated for positive, even airflow. The horizontal airflow allows for full use of solid shelves providing maximum culturing capacity.

# Contamination Control

Incubator interior, shelves and plenum system incorporate inCu-saFe® copper enriched, stainless steel alloy which offers germicidal properties of elemental copper. InCu-saFe prevents corrosion and discoloration of the incubator interior.

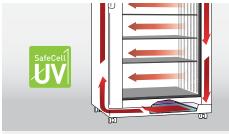
# Control and Monitoring

The incubator functions are managed by a fully integrated microprocessor controller with a range of setpoints and alarms for temperature and CO<sub>2</sub>. Two humidity ranges can be selected. All functions are programmable through the control panel. Independent LED displays for CO<sub>2</sub> and temperature are standard.



# CO2 Control

IR sensor coupled with the PID microprocessor controller is used to provide superior CO<sub>2</sub> control and exceptionally fast recovery after door openings. Gas system design minimizes CO<sub>2</sub> consumption.



# **Optional UV Protection**

Located safely below the interior base, the optional patented SafeCell™ UV lamp destroys airborne contaminants as they pass over the humidity reservoir surface. Pathogens introduced during door openings are ultimately removed.



### **User Convenience**

Softkey eight button menu for intuitive programming. LED indicators monitor incubator functions. Remote alarm contacts provided standard.



# CytoGrow ReachIn CO<sub>2</sub> Incubator

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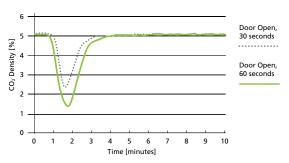
# Large Capacity CO<sub>2</sub> Incubator

The MCO-80ICL-PA | CO2INC30-G is ideal for culturing large volumes of biological samples, performing microbiological studies and working with large volume cell apparatus.

# **Humidity Control**

Humidity reservoir heaters are located outside the walls of the reservoir. They are not as susceptible to corrosion and scaling from water as competitive systems are. The unit can be set to normal (80% RH or above) or high (90% RH or above) humidity mode.

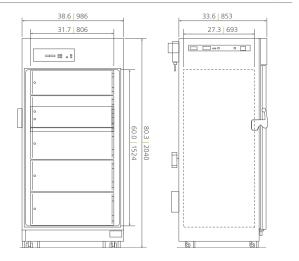
# Rapid CO<sub>2</sub> Density Recovery



IR sensor achieves ultrafast  $\mathrm{CO}_2$  recovery without overshoot, even following multiple door openings.

# **Dimensions**

Unit : inch | mm





**PHC Corporation of North America** 

External Dimensions (W $\times$ D $\times$ H) 1)	inches   mm	38.6 × 37.2 × 80.3   986 × 945 × 2040
Internal Dimensions (W $\times$ D $\times$ H)	inches   mm	31.7 × 27.3 × 60.0   806 × 693 × 1524
Volume	cu.ft. liters	30.1   851
Net Weight	lbs kg	606   275
Warranty 2)		3 years parts and labor
Temperature Control Range and Fluctuation 3)	°C	+5 above ambient to +50, ± 0.1
Temperature Uniformity 3)	°C	± 0.5 (9 point measurement)
CO, Control Range and Fluctuation 3)	%	0 to 20, ± 0.15
Humidity Level & Fluctuation	% RH	Normal mode: over 80 (high mode: over 90)
Control		
Controller		Microprocessor
Temperature Sensor		Thermistor
		2; LED (1 for temperature and 1 for CO <sub>2</sub> )
Display	qty	readable to 0.1 increments
Sensor	CO <sub>2</sub>	IR
Exterior Material		Painted steel
Interior Material		Stainless steel copper enriched alloy
Outer Door	qty	1; Dual pane heated glass with latch (provision for padlock)
Shelves	qty	5 (stainless steel copper enriched alloy)
Shelf Dimension (W × D × H)	inches mm	30.6 × 25.9 × 0.4   776 × 659 × 10
Max. Load per Shelf - Distributed Evenly	lbs kg	66.1   30
Max. Total Load	lbs   kg	330.0   150
Max. Shelf Capacity	qty	18
Access Port / Position	qty	2; right side and left side
Access Port Diameter	inches   mm	1.6 40 (with silicone (non-VOC) stopper)
Casters	qty	4; Dual wheel (swivel)
Leveling Feet	qty	4
Humidity Reservoir Drain	qty	Drain valve – lower side front (drainage tray provided)
Humidity Reservoir Material		Stainless steel
Decontamination Control		
Decontamination Control InCu-saFe Chamber, Air Plenum and Shelves	passive	Included (stainless steel copper enriched alloy)
	passive passive/active	Included (stainless steel copper enriched alloy) Optional Included
InCu-saFe Chamber, Air Plenum and Shelves		
InCu-saFe Chamber, Air Plenum and Shelves SafeCell UV Light System		Optional Included
InCu-safe Chamber, Air Plenum and Shelves SafeCell UV Light System Alarms		Optional Included (V=Visual Alarm, Buzzer Alarm, R=Remote Alarm)
InCu-saFe Chamber, Air Plenum and Shelves SafeCell UV Light System Alarms Power Failure	passive/active	Optional Included  (V=Visual Alarm, Buzzer Alarm, R=Remote Alarm)  R
InCu-safe Chamber, Air Plenum and Shelves SafeCell UV Light System Alarms Power Failure Temperature Deviation	passive/active	Optional Included  (V=Visual Alarm, Buzzer Alarm, R=Remote Alarm)  R  V-B-R
InCu-saFe Chamber, Air Plenum and Shelves SafeCell UV Light System Alarms Power Failure Temperature Deviation Gas Deviation	passive/active high CO2	Optional Included  (V=Visual Alarm, Buzzer Alarm, R=Remote Alarm)  R  V-B-R  V-B-R
InCu-saFe Chamber, Air Plenum and Shelves SafeCell UV Light System Alarms Power Failure Temperature Deviation Gas Deviation Supply Empty	passive/active high CO2	Optional Included  (V=Visual Alarm, Buzzer Alarm, R=Remote Alarm)  R  V-B-R  V-B-R  V-B-R
InCu-saFe Chamber, Air Plenum and Shelves SafeCell UV Light System Alarms Power Failure Temperature Deviation Gas Deviation Supply Empty Door Open	passive/active high CO2	Optional Included  (V=Visual Alarm, Buzzer Alarm, R=Remote Alarm)  R  V-B-R  V-B-R  V-B-R  V-B
InCu-safe Chamber, Air Plenum and Shelves SafeCell UV Light System Alarms Power Failure Temperature Deviation Gas Deviation Supply Empty Door Open Low Water in Humidity Reservoir	passive/active high CO2	Optional Included  (V=Visual Alarm, Buzzer Alarm, R=Remote Alarm) R V-B-R V-B-R V-B-R V-B-R V-B
InCu-safe Chamber, Air Plenum and Shelves SafeCell UV Light System Alarms Power Failure Temperature Deviation Gas Deviation Supply Empty Door Open Low Water in Humidity Reservoir Electrical and Noise Level Power Supply	high CO <sub>2</sub> CO <sub>2</sub>	Optional Included  (V=Visual Alarm, Buzzer Alarm, R=Remote Alarm)  R  V-B-R  V-B-R  V-B  V-B  V-B  V-B  V
InCu-safe Chamber, Air Plenum and Shelves SafeCell UV Light System Alarms Power Failure Temperature Deviation Gas Deviation Supply Empty Door Open Low Water in Humidity Reservoir Electrical and Noise Level Power Supply Noise Level 49	passive/active high CO2	Optional Included  (V=Visual Alarm, Buzzer Alarm, R=Remote Alarm) R V-B-R V-B-R V-B-R V-B-R V-B
InCu-safe Chamber, Air Plenum and Shelves SafeCell UV Light System Alarms Power Failure Temperature Deviation Gas Deviation Supply Empty Door Open Low Water in Humidity Reservoir Electrical and Noise Level Power Supply Noise Level 4 Outlets	high CO <sub>2</sub> CO <sub>2</sub>	Optional Included  (V=Visual Alarm, Buzzer Alarm, R=Remote Alarm)  R  V-B-R  V-B-R  V-B  V-B  V  115V, 10, 60Hz, NEMA 5-20P requires NEMA 5-20R receptacle
InCu-safe Chamber, Air Plenum and Shelves SafeCell UV Light System Alarms Power Failure Temperature Deviation Gas Deviation Supply Empty Door Open Low Water in Humidity Reservoir Electrical and Noise Level Power Supply Noise Level 4 Outlets Chamber Duplex – Vapor Proof Cover	high CO2 CO2 dB(A)	Optional Included  (V=Visual Alarm, Buzzer Alarm, R=Remote Alarm)  R  V-B-R  V-B-R  V-B  V-B  V  115V, 107, 60Hz, NEMA 5-20P requires NEMA 5-20R receptacle  33
InCu-safe Chamber, Air Plenum and Shelves SafeCell UV Light System  Alarms Power Failure Temperature Deviation Gas Deviation Supply Empty Door Open Low Water in Humidity Reservoir Electrical and Noise Level Power Supply Noise Level 4 Outlets Chamber Duplex – Vapor Proof Cover Cabinet Outlet	high CO <sub>2</sub> CO <sub>2</sub>	Optional Included  (V=Visual Alarm, Buzzer Alarm, R=Remote Alarm)  R  V-B-R  V-B-R  V-B  V-B  V  115V, 10, 60Hz, NEMA 5-20P requires NEMA 5-20R receptacle
InCu-safe Chamber, Air Plenum and Shelves SafeCell UV Light System Alarms Power Failure Temperature Deviation Gas Deviation Supply Empty Door Open Low Water in Humidity Reservoir Electrical and Noise Level Power Supply Noise Level 4 Outlets Chamber Duplex – Vapor Proof Cover	high CO2 CO2 dB(A)	Optional Included  (V=Visual Alarm, Buzzer Alarm, R=Remote Alarm)  R  V-B-R  V-B-R  V-B  V-B  V  115V, 107, 60Hz, NEMA 5-20P requires NEMA 5-20R receptacle  33
InCu-safe Chamber, Air Plenum and Shelves SafeCell UV Light System  Alarms Power Failure Temperature Deviation Gas Deviation Supply Empty Door Open Low Water in Humidity Reservoir Electrical and Noise Level Power Supply Noise Level 4 Outlets Chamber Duplex – Vapor Proof Cover Cabinet Outlet	high CO2 CO2 dB(A)	Optional Included  (V=Visual Alarm, Buzzer Alarm, R=Remote Alarm)  R  V-B-R  V-B-R  V-B  V-B  V  115V, 107, 60Hz, NEMA 5-20P requires NEMA 5-20R receptacle  33
InCu-safe Chamber, Air Plenum and Shelves SafeCell UV Light System  Alarms Power Failure Temperature Deviation Gas Deviation Supply Empty Door Open Low Water in Humidity Reservoir Electrical and Noise Level Power Supply Noise Level 4 Outlets Chamber Duplex – Vapor Proof Cover Cabinet Outlet Options	high CO2 CO2 dB(A)	Optional Included  (V=Visual Alarm, Buzzer Alarm, R=Remote Alarm)  R  V-B-R  V-B-R  V-B-R  V-B  V  115V, 1Ø, 60Hz, NEMA 5-20P requires NEMA 5-20R receptacle  33  1; 115V 3 amps max rating  1; 115V 1 amps max rating
InCu-safe Chamber, Air Plenum and Shelves SafeCell UV Light System  Alarms Power Failure Temperature Deviation Gas Deviation Supply Empty Door Open Low Water in Humidity Reservoir  Electrical and Noise Level  Power Supply  Noise Level 4  Outlets Chamber Duplex – Vapor Proof Cover Cabinet Outlet  Options  SafeCell UV Light System Humidity Reservoir—Auto Fill System CO <sub>2</sub> Gas Pressure Regulator	high CO2 CO2 dB(A)	Optional Included  (V=Visual Alarm, Buzzer Alarm, R=Remote Alarm)  R  V-B-R  V-B-R  V-B-R  V-B  V  115V, 1Ø, 60Hz, NEMA 5-20P requires NEMA 5-20R receptacle  33  1; 115V 3 amps max rating  1; 115V 1 amps max rating  MCO-80UVS-PA Included
InCu-safe Chamber, Air Plenum and Shelves SafeCell UV Light System  Alarms Power Failure Temperature Deviation Gas Deviation Supply Empty Door Open Low Water in Humidity Reservoir Electrical and Noise Level Power Supply Noise Level  Outlets Chamber Duplex – Vapor Proof Cover Cabinet Outlet Options SafeCell UV Light System Humidity Reservoir—Auto Fill System	high CO2 CO2 dB(A) qty qty	Optional Included  (V=Visual Alarm, Buzzer Alarm, R=Remote Alarm)  R  V-B-R  V-B-R  V-B  V-B  V  115V, 1Ø, 60Hz, NEMA 5-20P requires NEMA 5-20R receptacle  33  1; 115V 3 amps max rating  1; 115V 1 amps max rating  MCO-80UVS-PA  Included  MCO-80AS-PW
InCu-safe Chamber, Air Plenum and Shelves SafeCell UV Light System  Alarms Power Failure Temperature Deviation Gas Deviation Supply Empty Door Open Low Water in Humidity Reservoir  Electrical and Noise Level  Power Supply Noise Level 4  Outlets Chamber Duplex – Vapor Proof Cover Cabinet Outlet  Options SafeCell UV Light System Humidity Reservoir—Auto Fill System CO: Gas Pressure Regulator Automatic CO: Cylinder Changeover System Inner Door Kit	high CO2 CO2 dB(A) qty qty	Optional Included  (V=Visual Alarm, Buzzer Alarm, R=Remote Alarm)  R  V-B-R  V-B-R  V-B  V  115V, 10, 60Hz, NEMA 5-20P requires NEMA 5-20R receptacle  33  1; 115V 3 amps max rating  1; 115V 1 amps max rating  MCO-80UVS-PA Included  MCO-80AS-PW  0 – 15; MCO-100L
InCu-safe Chamber, Air Plenum and Shelves SafeCell UV Light System  Alarms Power Failure Temperature Deviation Gas Deviation Supply Empty Door Open Low Water in Humidity Reservoir  Electrical and Noise Level  Power Supply  Noise Level 40  Outlets Chamber Duplex – Vapor Proof Cover Cabinet Outlet  Options  SafeCell UV Light System Humidity Reservoir—Auto Fill System CO <sub>2</sub> Gas Pressure Regulator Automatic CO <sub>2</sub> Cylinder Changeover System Inner Door Kit InCu-safe Solid Shelf with Brackets	high CO2 CO2 dB(A) qty qty	Optional Included  (V=Visual Alarm, Buzzer Alarm, R=Remote Alarm)  R  V-B-R  V-B-R  V-B-R  V-B  V  115V, 1Ø, 60Hz, NEMA 5-20P requires NEMA 5-20R receptacle  33  1; 115V 1 amps max rating 1; 115V 1 amps max rating  MCO-80UVS-PA Included  MCO-80AS-PW  0 – 15; MCO-100L  MCO-80GC-PW  MCO-80ID-PW  MCO-80ID-PW  MCO-80ST-PW
InCu-safe Chamber, Air Plenum and Shelves SafeCell UV Light System  Alarms Power Failure Temperature Deviation Gas Deviation Supply Empty Door Open Low Water in Humidity Reservoir Electrical and Noise Level  Power Supply Noise Level 40  Outlets Chamber Duplex — Vapor Proof Cover Cabinet Outlet  Options SafeCell UV Light System Humidity Reservoir—Auto Fill System CO: Gas Fressure Regulator Automatic CO: Cylinder Changeover System Inner Door Kit InCu-safe Solid Shelf with Brackets InCu-safe Solid Shelf Reinforced with Brackets	high CO2 CO2 dB(A) qty qty	Optional   Included
InCu-safe Chamber, Air Plenum and Shelves SafeCell UV Light System  Alarms Power Failure Temperature Deviation Gas Deviation Supply Empty Door Open Low Water in Humidity Reservoir Electrical and Noise Level  Power Supply Noise Level 9  Outlets Chamber Duplex – Vapor Proof Cover Cabinet Outlet Options SafeCell UV Light System Humidity Reservoir—Auto Fill System CO <sub>2</sub> Gas Pressure Regulator Automatic CO <sub>2</sub> Cylinder Changeover System Inner Door Kit InCu-safe Solid Shelf Reinforced with Brackets Cell Roller Mounting Ramp Kit	high CO2 CO2 dB(A) qty qty	Optional   Included
InCu-saFe Chamber, Air Plenum and Shelves SafeCell UV Light System  Alarms Power Failure Temperature Deviation Gas Deviation Supply Empty Door Open Low Water in Humidity Reservoir Electrical and Noise Level  Power Supply Noise Level   Outlets Chamber Duplex – Vapor Proof Cover Cabinet Outlet  Options SafeCell UV Light System Humidity Reservoir—Auto Fill System CO: Gas Fressure Regulator Automatic CO: Cylinder Changeover System Inner Door Kit InCu-saFe Solid Shelf Reinforced with Brackets InCu-saFe Solid Shelf Reinforced with Brackets	high CO2 CO2 dB(A) qty qty	Optional   Included
InCu-safe Chamber, Air Plenum and Shelves SafeCell UV Light System  Alarms  Power Failure Temperature Deviation Gas Deviation Supply Empty Door Open Low Water in Humidity Reservoir  Electrical and Noise Level  Power Supply  Noise Level 4  Outlets  Chamber Duplex – Vapor Proof Cover Cabinet Outlet  Options  SafeCell UV Light System Humidity Reservoir—Auto Fill System CO <sub>2</sub> Gas Pressure Regulator Automatic CO <sub>2</sub> Cylinder Changeover System Inner Door Kit InCu-safe Solid Shelf Reinforced with Brackets Cell Roller Mounting Ramp Kit	high CO2 CO2 dB(A) qty qty	Optional   Included
InCu-safe Chamber, Air Plenum and Shelves SafeCell UV Light System  Alarms Power Failure Temperature Deviation Gas Deviation Supply Empty Door Open Low Water in Humidity Reservoir Electrical and Noise Level  Power Supply Noise Level 49 Outlets Chamber Duplex – Vapor Proof Cover Cabinet Outlet Options SafeCell UV Light System Humidity Reservoir—Auto Fill System CO: Gas Fressure Regulator Automatic CO: Cylinder Changeover System Inner Door Kit InCu-safe Solid Shelf Reinforced with Brackets Lell Roller Mounting Ramp Kit 4-20mA Analog Output	high CO2 CO2 dB(A) qty qty	Optional   Included

- <sup>1)</sup> Exterior dimensions of cabinet excluding handle, rear stand-off brackets and other external projections. Consult sales rep for doorway entry instructions, less than 37.2°.
- <sup>2)</sup> Current warranty offered at time of printing and may be subject to change; US and Canada only
- $^{3)}$  Ambient temperature (in a +20 °C to +35 °C), setting 37 °C, CO $_2$  5%, no load, air temperature measured at incubator center of the contract of the c
- 4) Nominal value Background noise 20 dB(A)

Note: Additional options available

## Specifications are subject to change without notice

Performance data herein is based on independent testing at time of publication.